

Project Manager Night Vision/ Reconnaissance, Surveillance and Target Acquisition (PM NV/RSTA)

Contract Opportunities

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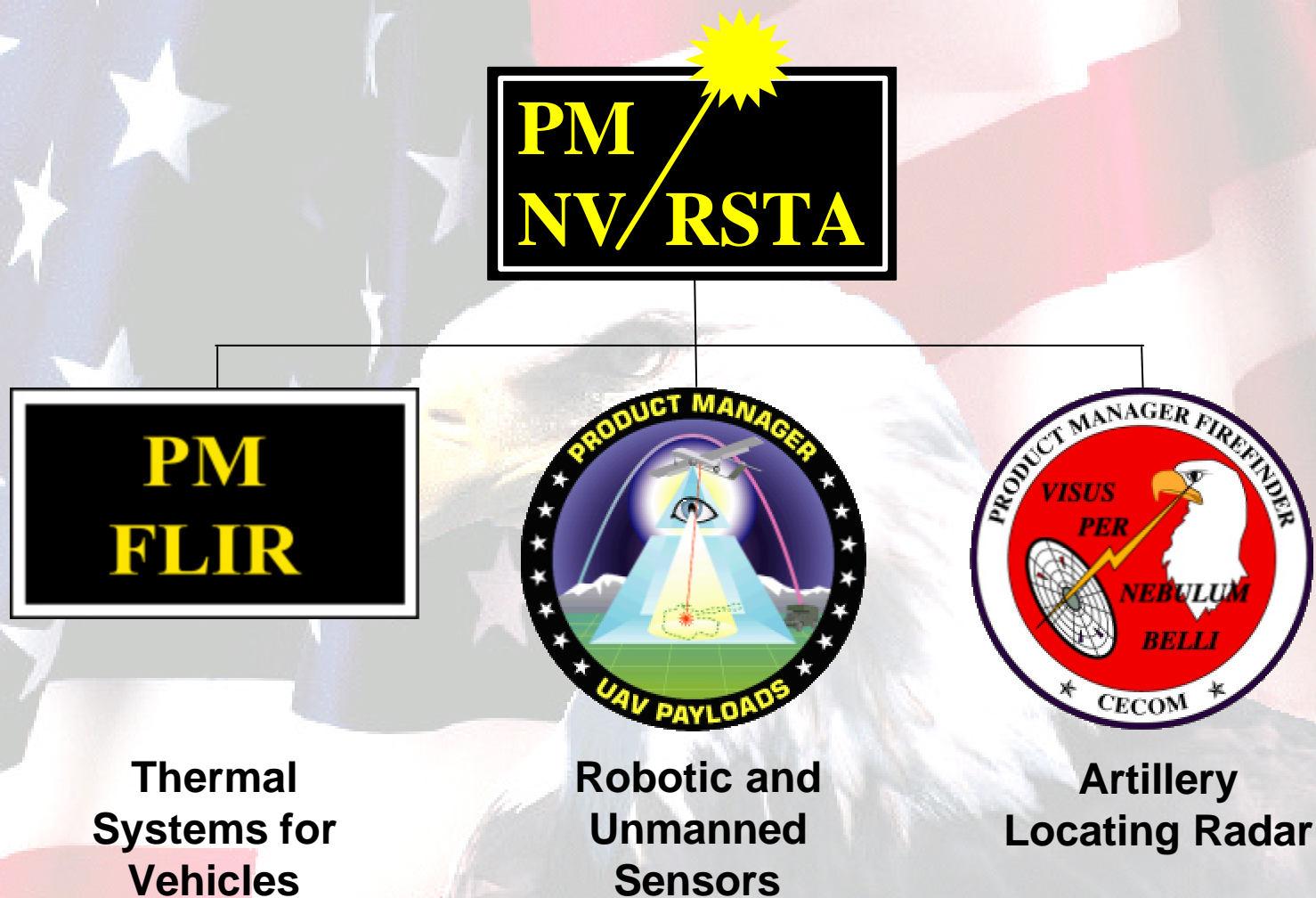
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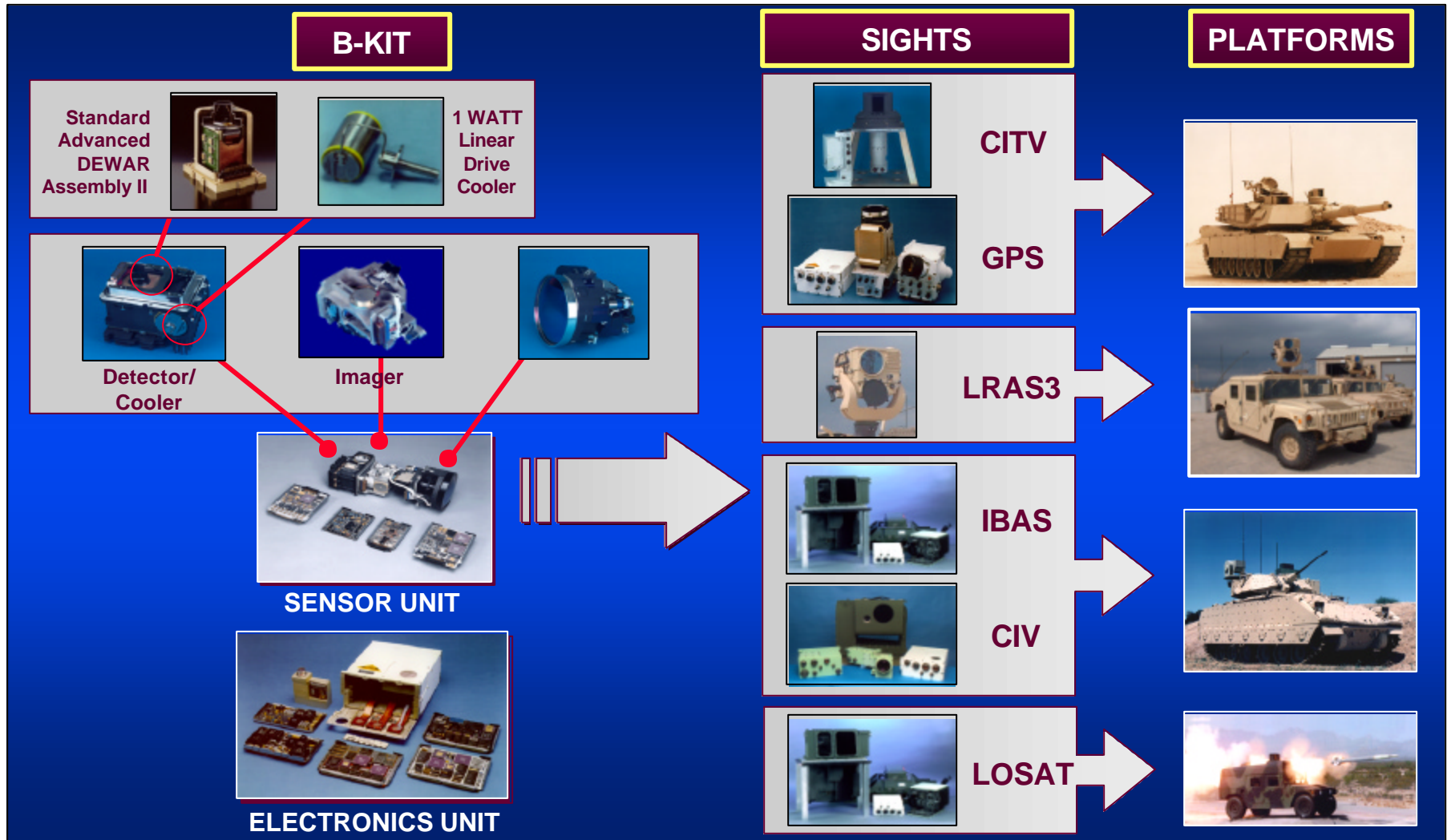


**PM NV/RSTA develops,
acquires, and provides
superior, affordable day/night
vision, multi-sensor and
artillery locating radar
systems to the American
warfighter.**

PM NV/RSTA Organization



Thermal System for Vehicles



Horizontal Technology Integration Second Gen FLIR



**Driver's Vision Enhancer
(DVE), AN/VAS-5**



**Long Range Advanced
Scout Surveillance System (LRAS3)**



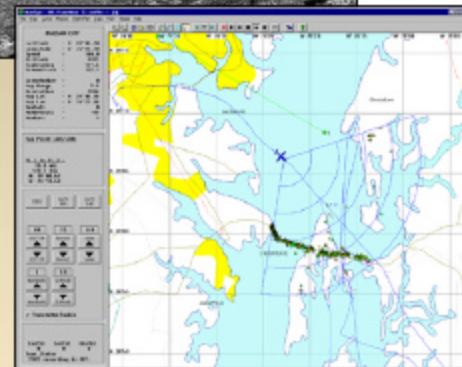
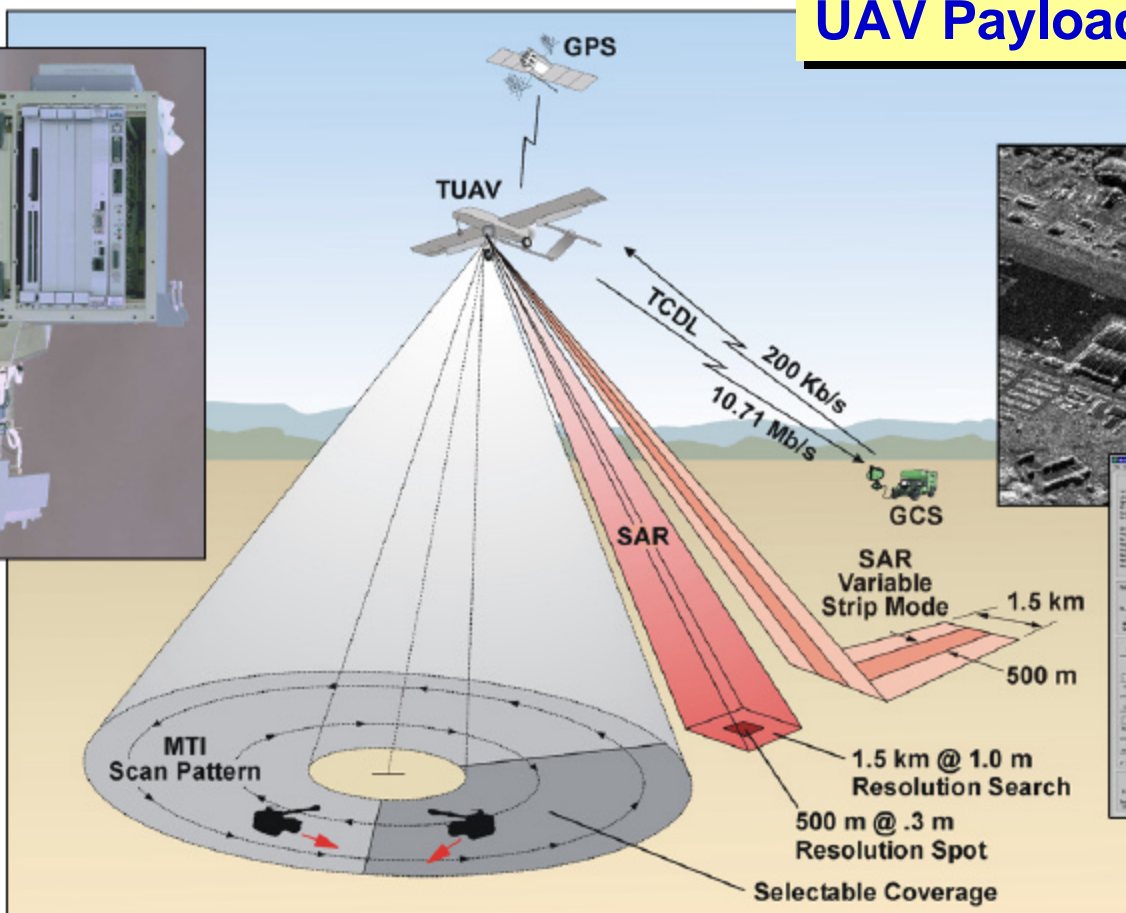
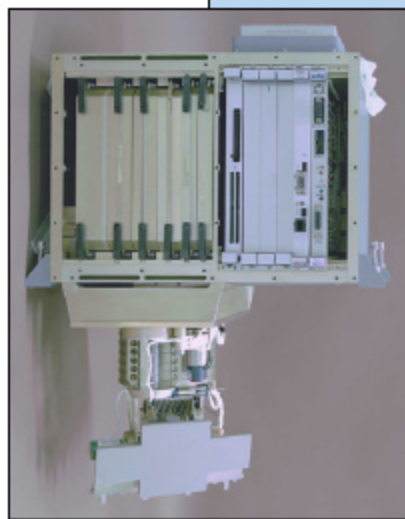
**Lightweight Laser Designator
Rangefinder (LLDR)**

PM Robotic & Unmanned Sensors

Current Business



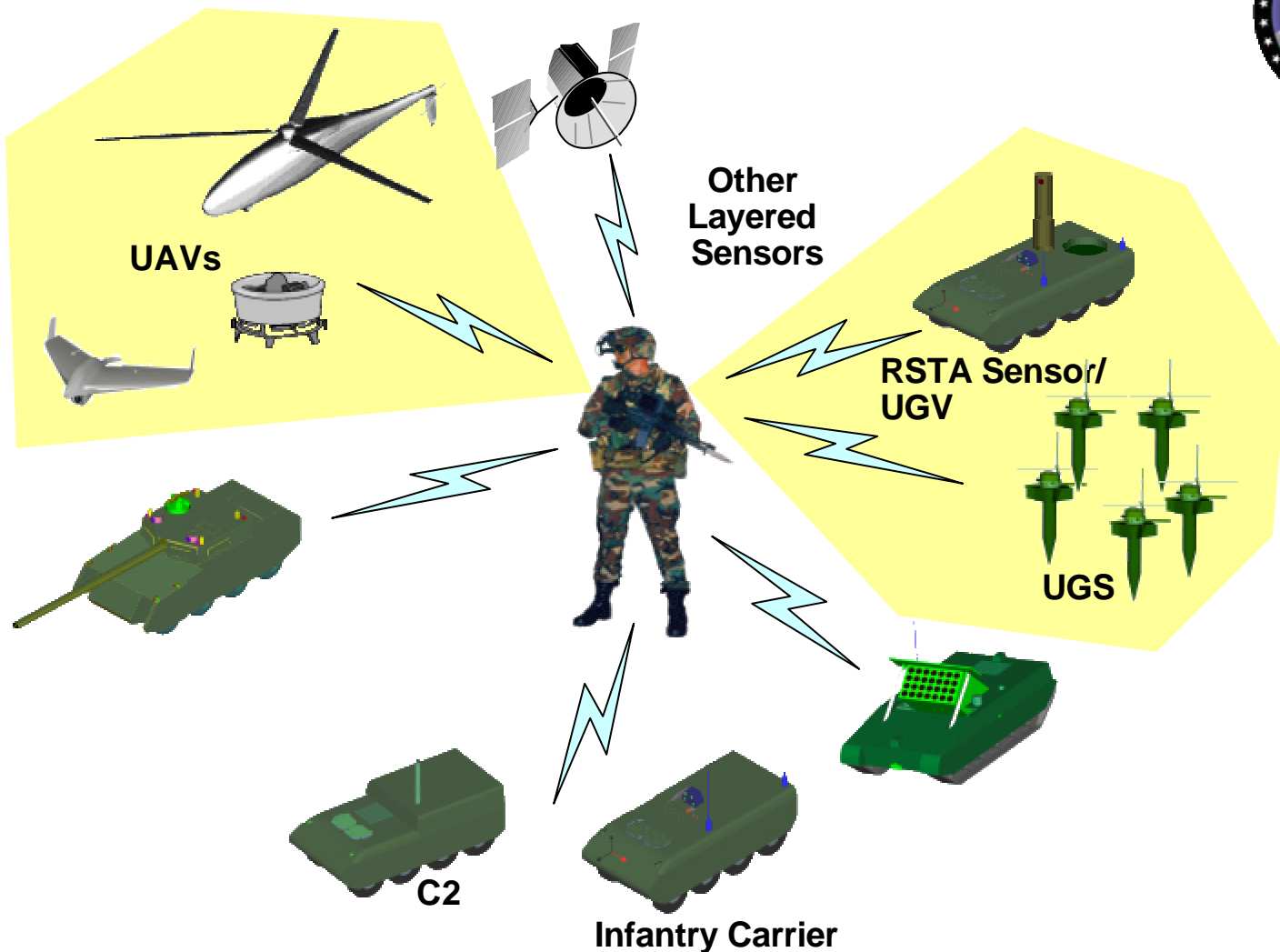
UAV Payloads



Synthetic Aperture Radar/ Moving Target Indicator (SAR/MTI)

Robotic & Unmanned Sensors

Future Opportunities





**Firefinder
(AN/TPQ-36(V)8)**



**Firefinder
(AN/TPQ-37(V)8)**

Artillery Locating Radar



**Firefinder
(AN/TPQ-47)**

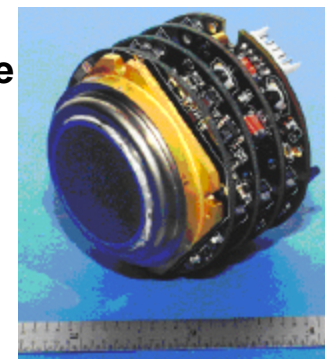
Future Programs

Uncooled Lightweight Thermal Module – B-Kit



Figure 1 – Boeing Microbolometer

Figure 2 – Nytech Camera Core



Some Examples

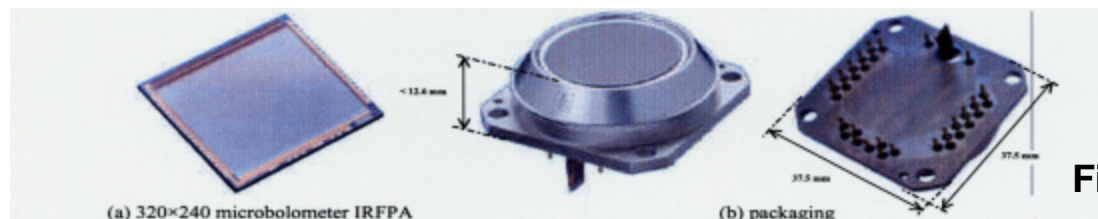
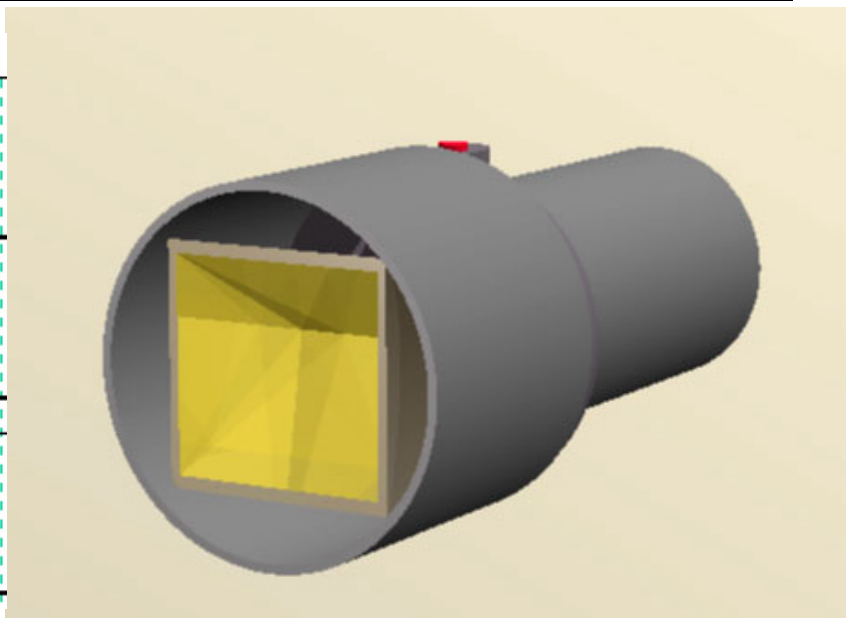
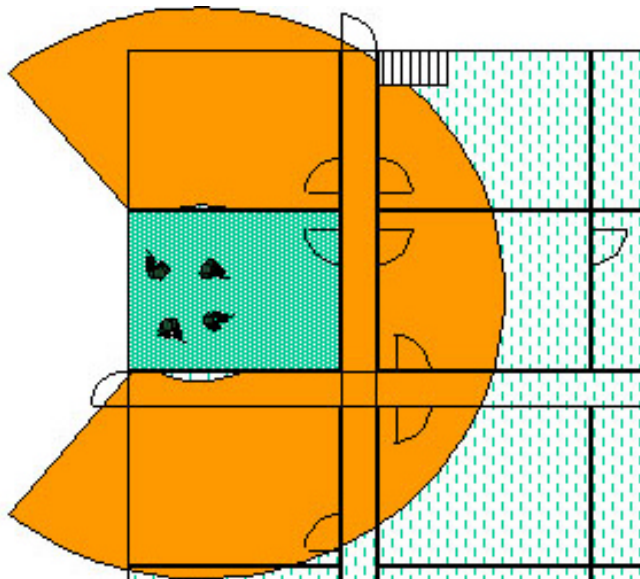


Figure 3 – Sofradir Microbolometer

- Uncooled B-Kit is a light weight, infrared module, that interfaces to the optics and electronics of various systems.
- Presently no standard exists for the lightweight thermal detector in industry. These thermal detectors are different from each other and can only be used with specific optics and electronics.
- The development of a lightweight thermal detector B-Kit standard will encourage competition and reduce costs.

Future Programs

Hand Held Sense through the Wall (STTW) Scanner



- Hand Held STTW Scanner is a light weight, stand alone, STTW device that provides infantry the capability of detecting people through building walls, ceilings, and floors.
- Hand Held STTW Scanner is the first in a series of STTW devices leveraging technologies assembled in National Institute of Justice coordinated research.
- Follow on STTW devices will provide enhanced capabilities on vehicular and unmanned platforms through HTI.



Thermal Omnibus II TWS Characteristics



- **Lightweight Day/Night Thermal Target Acquisition System**
- **Operates in Adverse Weather and Dirty Battlefield Conditions**
- **Provides Surveillance and Target Acquisition Capability for Individual and Crew Served Weapons**
- **Light and Medium Versions:**

	<u>Light TWS</u>	<u>Medium TWS</u>
Weight (lbs.)	2 (obj.) - 3 (threshold)	3.5 – 5
Field of View (° min)	14	6/18 switchable
Range (M, clear air, man tgt)	550	1100

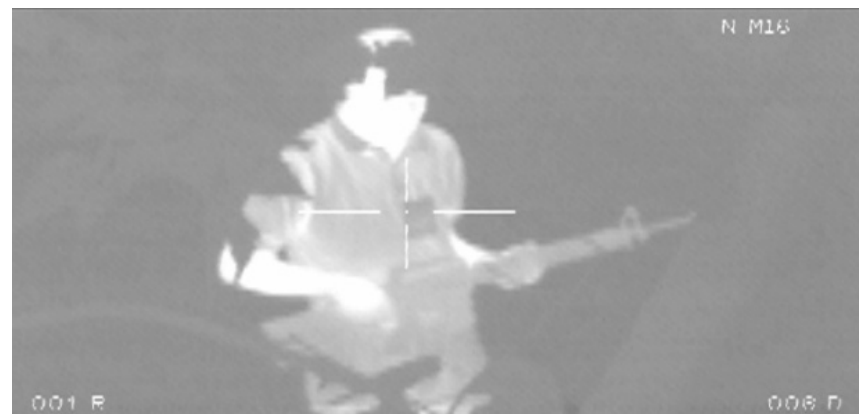
- **Desired Enhancements**

Lower Weight, Power, Operations & Support Costs

Increased Reliability, Range, Field of View

Path for Technology Improvement Insertion

Thermal Weapon Sight (TWS) AN/PAS-13



Thermal Omnibus II DVE Characteristics



- **Thermal Imaging Device to Aid Driving of Tactical Wheeled Vehicles and Combat Vehicles**
- **Enhances Vehicle Movement During Daylight, Darkness, Adverse Weather, and Dirty Battlefield Conditions**
- **System Consists of “A” and “B” Kits Comprised of Vehicle Installation/Mounting Hardware, Sensor, and Display/Control**
- **Supports Detection of 22 Inch Object at 110 Meters**
- **Required Minimum Field of View: 20° Vertical, 40° Horizontal**
- **Desired Enhancements**
 - Increased Field of View, Better Depth Perception
 - Improved Limited Visibility Operations, High Resolution Display
 - Increased Reliability, Reduced Operation & Support Cost
 - Ability to Incorporate Technology Improvements Such As Multi-Spectral Image

Driver's Vision Enhancer (DVE) AN/VAS-5



Hard Top HMMWV



Soft Top HMMWV



Visible

Thermal

Mounts

View Through DVE

Thermal Omnibus II Contract Opportunity

Objective:	Procurement of Light and Medium Thermal Weapon Sights (TWS) and Driver's Vision Enhancers (DVE)
Contract Type:	Firm Fixed Price, 3-Year Multi-Year w/ Basic Quantity and Options in Each Year, 2 Year Option (Total 5 Years), One or More Awards
Estimated Value:	Basic ~ \$82-92M (qtys: ~ 3500 LTWS, 2000 MTWS, 2500 DVE); Total Options ~ \$200M
Key Milestones:	1QFY03 RFP Release, 2QFY03 Contract Award, 1QFY04 First Deliveries
Technical Contact:	Mr. Daniel Kitts (TWS) 703-704-1292 Mr. Joseph Brooks (DVE) 703-704-1251
Acquisition Contact:	Ms. Deborah Gilligan 732-532-5454
Solicitation # or RFQ #:	TBD

Thermal Omnibus II TWS & DVE





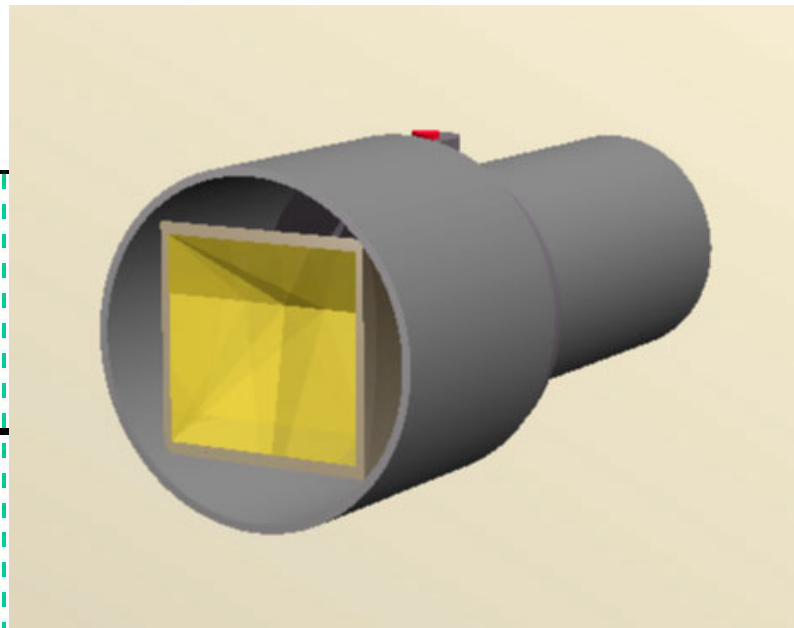
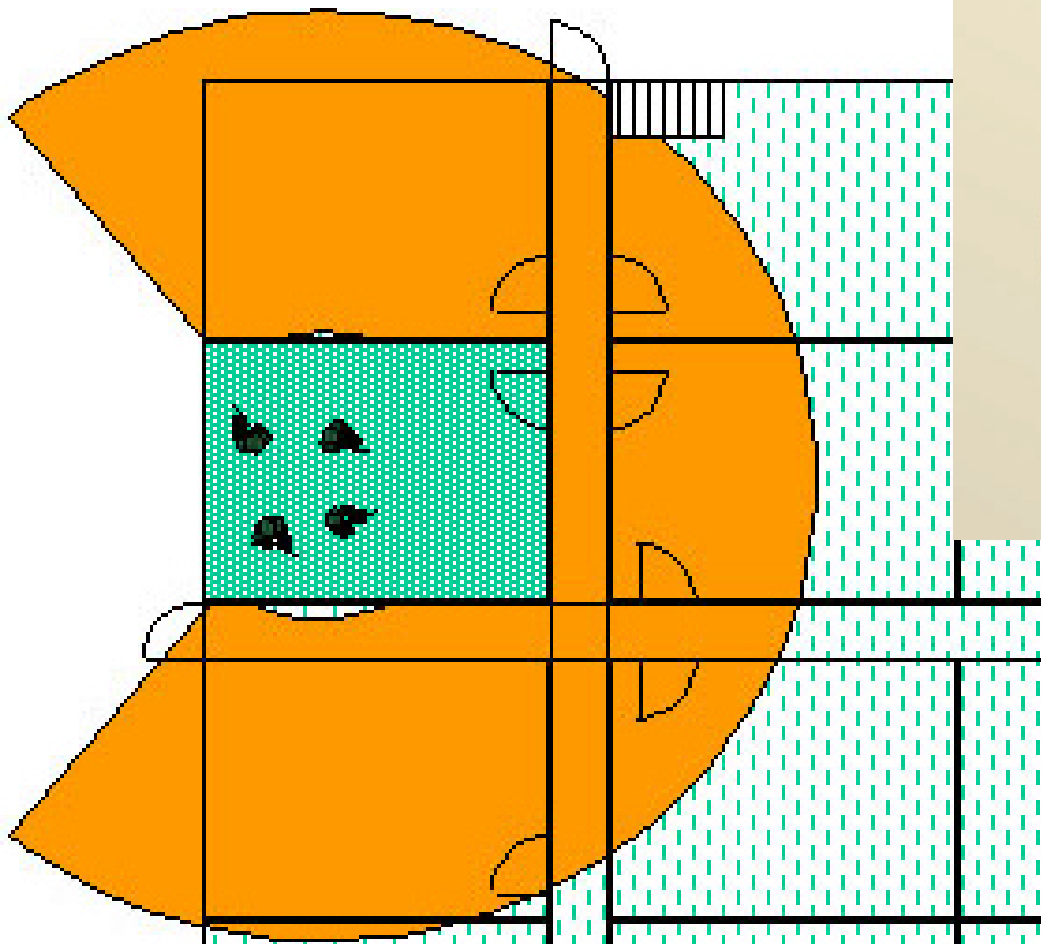
Sense Thru The Wall (STTW)

Characteristics



- **Lightweight System to Detect Humans on the Opposite Side of Walls**
- **Operates in Adverse Weather and Dirty Battlefield Conditions**
- **Performs Close Range Surveillance**
- **Performance Parameters: TBD**
- **Operational Requirements Definition Underway at Ft Benning, GA.**
- **CECOM I2WD Performing Technical Management of the System Development**

Sense Thru The Wall (STTW) Scanner



Sense Thru The Wall (STTW)

Contract Opportunity

Objective: Perform Concept Studies Leading to
Milestone B Decision for the First Sense Thru The Wall Infantry System

Contract Type: Broad Area Announcement, One or More Awards

Estimated Value: TBD

Key Milestones: 2QFY03 RFP Release, 2QFY03 Contract Award

Technical Contact: Mr. Robin Whitworth (703)704-1391

Acquisition Contact: TBD

Solicitation # or RFQ #: TBD



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